

ABSTRACT

Sub No. 7 A crystal substrate and a crystal film of a III-V compound of the nitride system which are manufactured easily and have few dislocations.

A method of manufacturing a crystal for the manufacture thereof, and a method of manufacturing a device with the use thereof. On a basal body, formed in order are a base crystal layer of, for example, gallium nitride (GaN), a first mask pattern of, for example, silicon dioxide (SiO₂), an intermediate crystal layer of, for example, gallium nitride, a second mask pattern of, for example, silicon dioxide, and a top crystal layer of, for example, gallium nitride. The first and second mask patterns have stripes arranged at least in one direction at unequally spaced intervals. The stripes are different in pitch from pattern to pattern. Thus, the mask patterns at least partly overlie one another in the direction of the thickness of the crystal layers.

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